CLAIMS

I claim:

1. A computerized method for determining the optimum strategy for controlling pollutant emissions from an electric power generating plant, the method comprising the steps of:

providing a historical data base for the electric power generating plant;

providing real time data;

predicting projected power generation requirements for a user specified future time period by using the historical data base and the real time data;

calculating a baseline projected emission rate for each pollutant over the user specified future time period using the projected power generation requirements;

displaying the baseline projected emission rate for each pollutant over the user specified future time period to a user;

displaying a pollutant emission limit for each pollutant over the user specified future time period;

displaying a list of pollution control options to the user;

calculating a projected emission rate for each pollutant over the user specified future time period for a user selected pollution control option; and

displaying the projected emission rate over the user specified future time period for the user selected pollution control option.

2. The computerized method of claim 1, wherein said step of providing a historical data base includes providing information as to hourly power generated, hourly amounts for each pollutant emitted, operating parameters of the electric power generating plant for each data point in the historical data base, and the type of fuel used for each data point in the historical data base for a first one year period.

3. The computerized method of claim 1, wherein said step of providing real time data includes providing data on current power output, current emission rate for each pollutant emitted, current operating parameters of the electric power generating plant, and current type of fuel being used.

4. The computerized method of claim 1, wherein said steps of displaying the baseline projected emission rate, displaying a pollutant emission limit, and displaying the projected emission rate include displaying on a graph for each pollutant.

5. The computerized method of claim 1, wherein said steps of predicting projected power generation requirements, calculating a baseline projected emission rate, displaying the baseline projected emission rate, displaying a pollutant emission limit, displaying a list of pollution control options, calculating a projected emission rate, and displaying the projected emission rate are performed by a computer having a display screen.

6.   A method for determining the optimum strategy for controlling pollutant emissions from an electric power generating plant, the method comprising the steps of:

providing a historical data base for the electric power generating plant including hourly power generated, hourly amounts for each pollutant emitted, operating parameters of the electric power generating plant for each data point in the historical data base, and type of fuel used for each data point in the historical data base for a first one year period;

providing real time data including current power output, current emission rate for each pollutant emitted, current operating parameters of the electric power generating plant, and current type of fuel being used;

predicting projected power generation requirements for a user specified future time period by using the historical data base and the real time data;

calculating a baseline projected emission rate for each pollutant over the user specified future time period using the projected power generation requirements;

displaying the baseline projected emission rate for each pollutant over the user specified future time period to a user, the baseline projected emission rate being displayed in a graph for each pollutant;

displaying a pollutant emission limit for each pollutant over the user specified future time period on the graph for each pollutant;

27   displaying a list of pollution control options to the user;

28   calculating a projected emission rate for each pollutant over

29   the user specified future time period for a user selected pollution

30   control option; and

31   displaying the projected emission rate for each pollutant over

32   the user specified future time period for the user selected

33   pollution control option on the graph for each pollutant, said

34   steps of predicting projected power generation requirements,

35   calculating a baseline projected emission rate, displaying the

36   baseline projected emission rate, displaying a pollutant emission

37   limit, displaying a list of pollution control options, calculating

38   a projected emission rate, and displaying the projected emission

39   rate being performed by a computer having a display screen.

7.   A system for determining the optimum strategy for controlling pollutant emissions from an electric power generating plant, the system comprising:

at least one continuous emission monitoring device positioned proximate a site of pollutant emission within the electric power generating plant;

means for measuring power output from the electric power generating plant;

a computer system having memory means, processor means, display means, input means, first communication means communicating with said continuous emission monitoring device, and a second communication means communicating with said means for measuring power output;

a historical data base for the electric power generating plant including hourly power generated, hourly amounts for each pollutant emitted, operating parameters of the electric power generating plant for each data point in said historical data base, and type of fuel used for each data point in said historical data base being stored in said memory means for a first one year period;

real time data including current power output, current emission rate for each pollutant emitted, current operating parameters of the electric power generating plant, and current type of fuel being used, being received from said continuous emission monitoring device and said means for measuring power output and being stored in said memory means on a continuing basis;

26 said memory means also storing a control program which

27 operates said processor means;

28 said processor means operating to predict projected power

29 generation requirements for a user specified future time period by

30 using said historical data base and said real time data;

31 said processor means operating to calculate a baseline

32 projected emission rate for each pollutant over the user specified

33 future time period using said projected power generation

34 requirements;

35 said processor means operating said display means to display

36 said baseline projected emission rate for each pollutant over the

37 user specified future time period to a user, said baseline

38 projected emission rate being displayed in a graph for each

39 pollutant;

40 said processor means operating said display means to display

41 a pollutant emission limit for each pollutant over the user

42 specified future time period on said graph for each pollutant;

43 said processor means operating said display means to display

44 a list of pollution control options to the user;

45 said processor means operating to calculate a projected

46 emission rate for each pollutant over the user specified future

47 time period for a user selected pollution control option; and

48 said processor means operating said display means to display

49 said projected emission rate for each pollutant over the user

50 specified future time period for the user selected pollution

51 control option on said graph for each pollutant.